### INTRODUCTION

ercury can cause a variety of harmful health effects. Exposure to mercury can damage the brain, central nervous system and kidneys and is particularly harmful to children. More than 60,000 children born annually are at risk for developmental impairments due to mercury exposure. Don't put your family at risk. Learn how to identify products containing mercury and mercury-free alternatives.

# What is mercury?

Mercury is a highly toxic metal that can be

found in solid, liquid or vapor form. Most people recognize mercury as a silver liquid used in thermometers and other measuring devices. Mercury also may be found as a solid when combined with other compounds; for example, dentists combine mercury with silver to make fillings. It is used in a wide variety of household,

medical and industrial products, including antiseptics, batteries, cosmetics, light bulbs and toys. Liquid mercury also has been sold in botanicas for use in certain folk medicines and cultural practices such as Santeria and Espiritismo.

# Health Effects of Mercury

Mercury can enter the body in several ways. It can be inhaled as vapor, ingested through contaminated fish and absorbed directly through the skin. It affects the brain, liver and kidneys and can cause

developmental disorders in children. The type and severity of these health effects depend upon the form and amount of mercury to which you are exposed and how much mercury has accumulated in your body over time. Since mercury can pass from expectant mother to unborn child, women of childbearing years and children, especially those younger than 6, are most susceptible to mercury poisoning.

# **Environmental Effects**

Less than a third of the mercury in the environment occurs naturally. The majority of mercury pollution that enters the air, lakes and streams is preventable. To protect the public health from industrial sources of mercury pollution, New Jersey has taken action to reduce mercury emissions from power plants, iron and steel melters and municipal solid waste incinerators.

Mercury from improper disposal of household products also can pollute our water and air. Improper mercury disposal methods, such as pouring it down drains, putting it in the trash and burning it in barrels and incinerators, can elevate mercury contamination to harmful levels.

When mercury enters lakes and waterways, it undergoes a natural chemical process and is converted to a more toxic form - methylmercury. The methylmercury builds up in the tissues of fish and animals, increasing in concentration as it moves up through the food chain, which results in high levels of mercury in some of the foods we eat. The New Jersey Department of Environmental Protection (DEP) issues annual freshwater fish consumption advisories because of high

mercury concentrations in fish. These are available from the DEP's Web site at www.nj.gov/dep/dsr/njmainfish.htm or by contacting the DEP's Division of Science, Research, and Technology at (609) 984-6070. The U.S. Environmental Protection Agency (EPA) also has issued marine fish advisories for saltwater fish, which are available from map1.epa.gov/.

### Household Items Containing Mercury

Many household items contain mercury. When used properly, these items pose no threat to you or your family. However, they can be hazardous if mishandled or improperly discarded.

Mercury-free products are available and should be purchased whenever possible.

One exception to the recommended

use of mercury-free products is fluorescent lighting. Even though fluorescent lights contain mercury, they are more energy efficient than non-mercury incandescent lights. The increased energy efficiency of fluorescent lights actually results in a reduced amount of mercury emissions from coal-burning power plants. Therefore, fluorescent lights still should be used and be disposed of properly at a household hazardous waste (HHW) collection event.

The following is a list of products containing mercury that may be found in your home and some alternatives:

Consumer Product	Mercury-Free Alternative
Thermometers – silver-colored liquid in glass	Alcohol (red liquid) or digital thermometer tube
Thermostats – all non-electronic	Electronic models
Fluorescent and compact fluorescent lights	No alternative; take lights to HHW collection for disposal
High Intensity Discharge (HID) Lamps – blue-tinted automotive headlamps	Mercury-free HID lamps
Neon Lamps – except the colors red, orange and pink	Mercury-free neon colored lamps
Button-cell batteries – button-shaped batteries usually found in watches, calculators, hearing aides and toys	No alternative; take button-cell batteries to HHW collection for disposal
Alkaline and carbon batteries – manufactured before 1994 and foreign manufactured	Rechargeable or alkaline batteries manufactured after January 1, 1996
Latex paints manufactured before 1991	Latex paint manufactured after 1991. Pre-1991 latex paint should be taken to a HHW collection site for disposal.
Shoes that light up may contain a mercury switch or a button-cell battery	Shoes that do not light up
Electrical switches - used in appliances such as some chest freezers, sump pumps, electric space heaters, clothes irons	Appliances with mechanical or pressure switches
Pilot light sensors on some gas appliances such as stoves, ovens, clothes dryers, water heaters and furnaces	Appliances with mechanical or pressure switches
Antiseptics – thimerosal is used in some contact lens solutions and nasal sprays. Mercurochrome is an old-time antiseptic.	Mercury-free solutions and antiseptics. Ask your pharmacist about alternatives.
Gauges – barometers, manometers, blood pressure and vacuum gauges with silver-colored liquid	Mercury-free gauges
Dental Amalgams – mercury is mixed with other metals for silver dental fillings	Non-mercury fillings made of gold, porcelain, ceramic or plastics. Talk to your dentist.

# How do I dispose of products containing mercury?

Products containing mercury should be kept out of the trash. Take them to your county's Household Hazardous Waste Collection Day. A list of contacts for each county is provided on the back page of this pamphlet.

To minimize potential hazards, keep products containing mercury in an airtight, leak-proof container. Keep the container stored out of reach of children and avoid breakage until it can be taken to a collection event.

# **Spills**

If mercury is spilled in your home, DO NOT VACUUM the spilled mercury. Vacuuming will spread mercury throughout your home. In the case of a spill, contact your local health department or the New Jersey Department of Health and Senior Services (DHSS) at (609) 984-1863 for clean up guidance. Additional guidance on cleaning up mercury spills is available online from DHSS at www.state.nj.us/health/eoh/survweb/merchome.pdf and from EPA at www.epa.gov/epaoswer/hazwaste/mercury/spills.htm

### **Businesses**

Businesses that generate products containing mercury must manage those products as a universal waste. Information on the Universal Waste Rule is available at www.state.nj.us/dep/dshw or by contacting the DEP's Division of Solid and Hazardous Waste at (609) 984-6650.



# **County Household Hazardous Waste Contacts**

Atlantic County(609) 272-6950	
Bergen County(201) 807-5825	
Burlington County(609) 499-5200	
Camden County(856) 858-5211	
Cape May County(609) 465-9026	
Cumberland County(856) 825-3700	
Essex County(973) 857-2350	
Gloucester County(856) 478-6045 ext. 14	
Hudson County(201) 795-4555	
Hunterdon County(908) 778-1110	
Mercer County(609) 278-8086	
Middlesex County(732) 745-4170	
Monmouth County(732) 922-4815	
Morris County(973) 829-8006	
Ocean County(732) 506-5047	
Passaic County(973) 305-5738	
Salem County(856) 935-7900	
Somerset County(908) 231-7681	
Sussex County(973) 579-6998	
Union County(908) 654-9890	
Warren County(908) 453-2174 ext. 226	

### **Online Information**

Interstate Mercury Education and Reduction Clearinghouse (IMERC) maintains a searchable database of mercury containing products. IMERC also provides educational information concerning mercury.

www.newmoa.org/prevention/mercury/imerc

Northeast Waste Management Officials Association (NEWMOA) provides general information about mercury.

www.newmoa.org/prevention/topichub/

U.S. Environmental Protection Agency Web page provides general information on mercury and fish advisories.

www.epa.gov/mercury

New Jersey Mercury Task Force Report

www.nj.gov/dep/dsr/mercury\_task\_force.htm

New Jersey Department of Health and Senior Services provides general information on mercury and mercury exposure.

www.state.nj.us/health/eoh/survweb/ mercury.htm

### **Additional Online Information**

The Association of New Jersey Household Hazardous Waste Coordinators provides information on the household hazardous waste collection programs of each county.

www.njhazwaste.com

New Jersey Department of Environmental Protection's Division of Solid and Hazardous Waste provides information on the proper management and disposal of solid waste in New Jersey.

www.state.nj.us/dep/dshw

New Jersey Department of Environmental Protection's Division of Science, Research, and Technology offers information on research conducted on mercury.

www.state.nj.us/dep/dsr/mercury

New Jersey Department of Health and Senior Services provides guidance on cleaning up mercury spills.

 $www.state.nj.us/health/eoh/survweb/\\ merchome.pdf$ 

EPA provides recommendations on cleaning up mercury spills.

www.epa.gov/epaoswer/hazwaste/mercury/spills.htm



# Is Your Life MERCURY FREE?



Richard J. Codey, Acting Governor Bradley M. Campbell, Commissioner